

Lee II et al. in view of U.S. Patents 3,899,698 issued to Kleinschmidt, 5,231,326 issued to Echols, and 4,451,753 issued to Ogawa et al. Applicants respectfully traverse the rejection of these claims.

Lee, discloses a piezoelectric element having a fixed first end and a second end which may deflect and contact a valve seat (Column 3, lines 41-50). Goldenberg discloses a piezoelectric element having a fixed first end and a freely deflecting second end. Frish discloses a piezoelectric element which is urged by a guide spring to contact two support zones (Column 4, lines 5-7). Kleinschmidt, Echols, and Ogawa disclose compensating by electrical means for temperature induced changes in a piezoelectric element.

Applicants believe that claims 1-14 are not obvious in light of these references. First, Applicants believe that Goldenberg does not disclose a stop or stop means "operable to prevent displacement of the piezoelectric device" as recited in claims 1 and 14. Therefore, this combination suggested by the Examiner fails to teach the claimed invention.

Second, the possibility that Lee or Frish could have been modified so as to result in the claimed invention would not have made the modification obvious without some reasonable suggestion or motivation in the art to make the modification or combination suggested by the Examiner. In this instance, there is no such suggestion. Although the Examiner has stated that the "nature of the constructions makes temperature induced changes," neither of these references disclose any temperature induced changes or a recognition that charge redistribution would be generally useful in combination with a stop. As stated in the pending application, without charge redistribution, "when an operating voltage is applied, energy must be expended to overcome the electrical field before movement ... will occur" (Paragraph 19), and such additional energy expenditures are not disclosed or recognized by these references.

For the foregoing reasons, Applicants assert that claims 1-14 are not obvious over the art of record, alone or in combination, and it is respectfully requested that the rejection under 35 U.S.C. 103 be withdrawn upon reconsideration.

US 0993192108P1



Creation date: 06-05-2003
Indexing Officer: PRT2827 - GAU2827 PRINTER
Team: GAU2827PrtWorkingFolder
Dossier: 09931921

Legal Date: 01-05-2003

No.	Doccode	Number of pages
1	A...	1
2	REM	8

Total number of pages: 9

Remarks:

Order of re-scan issued on